4-1. Scope

This chapter describes Production, Planning and Control (PP&C) procedures, ISM PP&C management responsibilities, regional competitive bidding process, work loading, and performance standards for establishing and maintaining regional COEs. (Note: HQ AMC, National Business Office, will manage new site fielding on a case by case basis. Once the new site has met all prerequisites, (i.e., cost mapping, ISM automation system fielding) the transition period will begin. The NSMM, RSMM/TSMM, and LSMMs (or AMMs) will determine when the new site will begin participating in regional PP&Cs and competing for national work. After four regional PP&Cs, the LSMMs and AMMs will be fully integrated into the regional PP&C process. By this time, LSMMs and AMMs will be familiar with the ISM business process, will have competed for COE lines and national work, and will be capable of effectively administering the ISM program.)

4-2. General

- a. Production, Planning and Control (PP&C) is the processes for determining sustainment maintenance requirements and the tasks required to work load those requirements among the available maintenance activities. The RSMM/TSMM conduct the regional PP&C process involving the NSMM, LSMMs and AMMs.
- b. PP&C requirements are determined by considering readiness, cost avoidance, demands, and training. Regional and Theater COE candidates are coordinated with AMC MSCs, by the NSMM, in order to prevent repairs to excess.
- (1) <u>Readiness</u> Readiness impact is determined by reviewing historical weapon system readiness, asset posture, and availability of system components from the wholesale system. High readiness demands cause increased impact upon the supply system, thus creating greater emphasis to add items to the local reparable item and COE repair programs.
- (2) <u>Cost Avoidance</u> Cost Avoidance represents the savings to the installation supply activity (Retail Stock Fund or AWCF) compared to the potential costs incurred to that supply activity to buy the item. This technique is not appropriate for forecasting or calculating ISM Cost Savings or Cost Avoidance performance metrics, as discussed in Chapter 3. For example, the difference between the buy cost (AMDF price minus turn-in credit) and the repair cost (including transportation and packaging/crating) for an item added to the ISM program is determined by analyzing the average repair costs obtained from completed work orders and comparing those to the buy cost. The ISM automation system contains logistics data and has the capability of providing statistical information for analysis. The higher the repair cost avoidance per hour, the greater the emphasis to add the item to the local reparable item or regional COE repair programs.
- (3) <u>Demand</u> Demand is the number of times a requisition has been submitted to the supply system for a specific NIIN or its substitute. Demand is the baseline element for identifying items with the highest COE potential. Identifying demands is a critical step in developing or modifying a reparable item program. The RSMM/TSMM use the Logistics Support Activity (LOGSA) Central Demand Database (CDDB) for demand data. The CDDB information is updated regularly in the ISM automation system. Additional tools, such as the "Top Cost Drivers" and "Zero Balance" lists, are used to assist in the COE candidate identification process.
 - (4) General Support Maintenance Unit (GSMU)Training (Reference Chapter 8)

4-3. Management Responsibilities

a. <u>ISM Corporate Board</u> - The Corporate Board will resolve all issues elevated by the National Sustainment Maintenance Management Office.

b. NSMM-

- (1) The NSMM will coordinate between national and regional managers to ensure the most cost effective and efficient decision is made to meet Army readiness and sustainment requirements. The primary goal is to prevent repairing or procuring excess Army stocks. Regional, COE, and local sustainment maintenance plan and retail stock status are provided to the AMC NICPs for review. The AMC NICPs provide the following information:
 - (a) Reduced Price Initiative (RPI) Is the Item (NIIN) on or planned for the Reduced Price Initiative Program?
 - (b) Requisition Objective (R/O) Is the Item being repaired to excess?

- (c) Average Monthly Demand (AMD) What is the wholesale average monthly demand?
- (d) Requirements, Determination, and Evaluation Recommendation Is the item excess, cutback, repaired, or procured?
- (e) Unserviceable Stock Position What is the unserviceable stock on-hand?
- (f) ISM Program Candidate Are any of these items a candidate for a National ISM repair program?
- (2) The central considerations in the NSMM evaluation are system and equipment availability, unit readiness, time requirement, training benefits, infrastructure utilization, skill base sustainment, and cost. Appropriate recommendations are forwarded by the NSMM to NICP and regional manager(s), who take appropriate action to adjust regional and national repair programs or procurements.
- c. <u>RSMM/TSMM</u> The RSMM/TSMM will conduct a semi-annual repair requirements determination review in support of the PP&C. The review is based on the same requirements specified in the preceding paragraph, but considers buy vs repair decisions. The ISM automation system makes it possible to determine the best repair candidates and location to perform the repair(s) in order to meet regional requirements. The RSMM/TSMM make final approval of reparable items selected for induction into the regional program and coordinates funding actions in support of regional COE programs. Reparable items are selected for possible induction into an ISM program as a COE line based on demand history, forecasted demand, assets on hand, available fiscal resources, impacts on projected programs, cost to repair versus cost to buy, washout rates, availability of items from source of supply, cost to transport, expected and historical order ship time, projected on-site turn around time, cost to stock (procurement, storage, issue, disposal cost), and essentiality to system and equipment availability and unit readiness. Summary requirements are transmitted to the NSMM for inclusion in the Army sustainment maintenance plan.
- d. <u>LSMM</u> Each LSMM will conduct a review of the reparable item requirements at their respective installation/state. Utilizing the PP&C process, each LSMM will develop a reparable items candidate list based on sustainment maintenance capability, capacity, current workload, and projected requirements for all ISM activities performing GS/SRA and depot level repairs. Reparable items with maintenance repair code of F, H, D, or L may be added into the ISM program. The ISM automation system provides the capability to efficiently develop individual programs and transmit the recommended program to the RSMM/TSMM for review and approval. Addition of sustainment maintenance activities legacy Management Information System (MIS) to the ISM automation system will streamline the requirements and determination process. LSMM managers will forward ISM candidates and/or those requirements for which they have no capability or capacity to repair to the RSMM/TSMM.
- e. <u>AMM</u> Each AMM manager will conduct a review of the reparable item requirements at their respective installation/state. Reparable items with maintenance repair code of F, H, D, or L may be candidates for the ISM program. The AMM manager will forward ISM candidates and/or those requirements for which they have no capability or capacity to repair to the LSMM. The AMM will provide available capability and capacity data to the LSMM. The LSMM will include the AMMs input when determining available LSMM sustainment maintenance capability and capacity to perform local, regional and national work.

4-4. COE Reparable Candidates

- a. COE reparable candidates will generally be selected from items that are on at least one installation Reparable Exchange (RX) List. New RX items will also be considered for inclusion as COE candidates. These lines will be reviewed in light of readiness and availability needs, cost avoidance, training requirements, and annual demands. Comments and recommendations will be accepted from the LSMMs/AMMs, NSMM, and MACOMs for candidate lines. FORSCOM Materiel Management Center (FMMC) reparable items program list will be reviewed by the RSMM, and if applicable, requirements will be added to the COE production quota.
- b. Each candidate item will be assigned a priority for selection based on potential cost avoidance per hour. Identifying items with the highest potential cost avoidance is a critical step in developing a regional repair program.
- c. COE candidates will be reviewed and selected based on the following criteria:
- (1) Items must support a major weapon system or have a significant readiness and availability impact.
- (2) Costs to repair items (including transportation, packaging and crating, and fully-burdened labor and materiel) must not exceed 80% of the buy cost (AMDF price minus table credit); or the item must be in short supply at the wholesale level; or projected demands will exhaust current wholesale stocks within six months.

- (3) Component demands must be common to at least two installations with at least nine demands per year within the region for ground reparable items and three demands per year within the region for aviation and missile reparable items.
- (4) Items should have at least six regional repairs per year for ground and three regional repairs per year for air or missile Based on projected cost avoidance, some items may be considered, even though they are new to regional maintenance activities.
 - (5) The washout rate for a regional maintenance activity repairing an item should not exceed 50%.
- (6) Reparable items with a Maintenance Repair code of "F" will not be considered as a COE candidate unless at least 60 percent of the regional demands are repaired in a regional maintenance activity and visible in the ISM automation system.
- (7) AMDF price is greater than or equal to \$250.00. Request for exception will be on a case by case basis and must be approved by the RSMM/TSMM.

4-5. Regional Invitation For Bids (IFBs)

a. This section applies to AMMs, LSMMs, RSMM/TSMMs and NSMM offices. National COE repair bidding procedures are found in Chapter 6. All bids will be processed using a sealed bid procedure. All regional COE repair work will be competed using a standardized bidding process. Bids on COE work (either candidate lines or rebid lines) will be solicited through an IFB sent by the RSMM/TSMM to all LSMMs. The IFB will be distributed to all regional competitors. IFBs will contain all elements necessary for a bidder to submit a bid to the RSMM/TSMM. A sample IFB is shown as enclosure 4-1.

b. Bid Elements

- (1) Repair Specifications The Technical Manuals contain the detailed description of work to be performed. Details for regional repairs are found in the equipment technical manuals (TMs) series 10-40. If applicable, an AMC approved Special Repair Authority (SRA) may apply.
 - (2) Quantity Number of unserviceable items to be repaired will be given as annual and monthly regional requirements
- (3) Bid Instructions Bid instructions will include special information such as the precise place and time to submit the bid and any other instructions pertaining to the bid.
- (4) Bidder's POC Each LSMM will identify a POC for coordinating bids. The LSMM will submit all question(s) concerning bid in writing to the RSMM/TSMM POC prior to the specified deadline date and time.
- c. Bid Preparation Time In most instances, LSMMs will be given a specified time (time between the RSMM/TSMM issuing the IFB and opening of bids) of 15-30 calendar days to prepare their bid for a NIIN, unless the RSMM/TSMM determines that a shorter period is reasonable or required.
- d. Clarification of IFBs LSMMs with question(s) pertaining to an IFB may submit the question(s) in writing to the RSMM/TSMM POC prior to the specified deadline date. The preferred method of submitting questions is by e-mail or fax. The LSMM question and the RSMM/TSMM response will be provided to all LSMMs simultaneously via e-mail. These procedures will be used to ensure all LSMMs receive the same information relating to the IFB.

e. IFB Amendments -

- (1) Amendments to the IFB, prior to bid opening (e.g. change to annual production plan) will be sent to each LSMM by the RSMM/TSMM. Each LSMM must acknowledge receipt of the amendment by e-mail or fax indicating the name of the LSMM POC. This process will ensure all parties have received notification of amendments.
- (2) If an amendment changes any bid information, the bidder is responsible for submitting a new bid to the RSMM/TSMM prior to the deadline. The RSMM/TSMM may extend the deadline to allow for additional processing time. Official notification will be sent with the amendment specifying the date and time of any revised deadline.

- (3) Changes to a bid, as a result of an amendment to the IFB, will be forwarded by the LSMM to the RSMM/TSMM. The amended bid must be on a 3.5 inch floppy accompanied by a hard copy, in a sealed envelope with the NIIN, name of the installation submitting the amendment and "Amended Bid" printed on the outside of the envelope.
- (4) Amended bids will be accepted by the RSMM/TSMM only if there has been an official amendment to the IFB. Each bidder will be allowed to submit only one amended bid for a NIIN.
- f. Late Submission of Bids Under most circumstances, bids or amended bids received after the deadline stated in the IFB will not be considered. The bidder is solely responsible to prove mishandling (i.e., carrier). No deviation to the bid process will be considered or accepted (Reference paragraph 4-6.f).
- g. Opening Sealed Bids All bids will be opened publicly on the date, time, and at the place specified on the IFB. All bids received will be kept in a secure area prior to opening. Information concerning the number of bids received on a particular NIIN or names of the bidders will not be provided to competitors. No bid information, such as parts cost, man-hours, and washout data, may be changed after bids have been opened.
- h. Non-Responsive Lines Lines that receive a no bid will be considered to be non-responsive lines. The RSMM/TSMM may compile a list of non-responsive lines and send it to the LSMMs for reconsideration. The LSMMs will have two (2) working days to submit bids on these lines. In cases of non-responsive lines, the RSMM/TSMM POC will accept bids by fax. If no bids on a particular line are received after two working days, the line may be removed from award consideration during the upcoming PP&C. Negative responses for each line being reconsidered will be required from each LSMM. A no bid or a failure to award a line may cause the RSMM/TSMM to elevate the line to the NSMM. The NSMM may elect to use cross-regional procedures to find another source of repair (SOR). Refer to Chapter 5 for cross regional procedures.

4-6. Sealed Bid Submission Process

- a. Sealed bids will be a formal response by the bidder. All LSMMs wishing to compete for regional work must follow the specific guidelines outlined in this section. The process will be closely regulated and any deviations from procedures outlined in this chapter, on the part of a bidder, will be grounds for disqualification.
- b. Each LSMM is authorized to submit bids on any lines within their capability and capacity. The LSMM will identify the maintenance activity interested and capable of performing regional work on specific lines. Bids will be submitted by the LSMM to the RSMM/TSMM using the standard bid forms found in Enclosure 4-2 and Enclosure 4-3. Each will be returned with the bid spreadsheet. Bid memorandums must consist of a proper letterhead, office symbol, with the signature of the designated representative authorized to commit installation's resources in performance of regional repair work.
- c. All required information must be provided for each NIIN listed on the spreadsheet. Missing information, will be cause for a bid to be considered null and void. The RSMM/TSMM will not accept hand-written bid information. Each bidder must recreate the spreadsheet and type in all the applicable information. In the event of a discrepancy between the hard copy spreadsheet and the electronic spreadsheet the hard copy will take precedence.
- d. Only one bid will be accepted from each LSMM for each NIIN being considered. The first bid received by the RSMM/TSMM will be the only bid considered, unless an amendment is made to the IFB by the RSMM/TSMM. LSMMs may split bids between two AMMs or maintenance activities. Procedures for split bids are shown below:
- (1) Split Bid COE lines to be repaired may be split between no more than two maintenance activities by the LSMM. The LSMM will submit bid information for each of the two maintenance activities being considered. Information being forwarded to the RSMM/TSMM will include the work load quantity for each maintenance activity being considered. The RSMM/TSMM will process the two bids as one LSMM bid by calculating the total cost to repair the annual requirement (reference figure 4-1). Individual bids will be calculated for each maintenance activity (no more than two per line), and prorated based on the projected quantity to be repaired at that maintenance activity. Total calculated cost for the two maintenance activities will be considered as a single bid from the LSMM. This bid will be compared to all other bids received.

EXAMPLE: Annual Requirement = 100

 $\underline{MA#1}$. Total cost = \$100 x 70 each = \$7,000 $\underline{MA#2}$. Total cost = \$120 x 30 each = \$3,600 Total Bid Price = \$10,600

Figure 4-1

- (2) LSMMs submitting a split bid that fails to win will receive no concessions from the RSMM/TSMM. No consideration will be given to a loosing bid, even though one of the two maintenance activities may have a lower cost to repair when compared to the winning bidder.
- (3) The RSMM/TSMM will determine where installations and states will ship unserviceable items when a NIIN is split between two maintenance activities.
- (4) LSMMs are not authorized to realign or redistribute regional COE workload among any other local maintenance activities without requesting a maintenance exception from the RSMM/TSMM.
- e. Each bid cover letter, hard copy spreadsheet, and 3.5 inch floppy (with the spreadsheet file in Excel) will be placed inside an appropriate sized envelope and sealed. The outside of the envelope should clearly specify the sending installation's name.
- f. Sealed bids will be mailed or hand-delivered on, or before, the deadline to the precise location specified in the IFB. No exceptions will be made for late bids, regardless of reason. Bids sent to the wrong location, and not received on time, will be rejected. Bidders should consider using a return receipt notification. Bidders sending bids by other means, assume all risk of late delivery and possible rejection of bids.
- g. Bidders must ensure all information on the standardized bid form is complete. Once the sealed envelope is opened, any bid missing required information will be considered non-responsive and will not be processed further. Therefore, it is critical that bidders thoroughly check all information before sealing the bid and delivering it to the RSMM/TSMM. A suggested checklist of items to be included in the envelope is:
 - (1) All bid form entries are filled out fully and completely.
 - (2) Check and recheck all price and labor computations.
- (3) Note the deadline (date and time) on the IFB and the location where the bid(s) must be delivered. Allow enough lead-time for mailing to ensure bids arrive prior to the published deadline.

4-7. Bid Processing Procedures

Once received, the RSMM/TSMM decision making process used to evaluate bids includes the use of screening and evaluation criteria.

- a. <u>Screening Criteria</u> The screening criteria are simply a GO/NO GO process. Competing maintenance activities not meeting any one of the screening criteria listed below will be ineligible to compete further for the NIIN being bid.
- (1) Capacity/Capability Bids submitted will be screened to determine whether a maintenance activity possesses the basic capacity and capability to perform repairs on the component being bid. These screening questions are found below. Screening answers "YES" and "NO" are to be provided on the standardized IFB (enclosure 4-3). Each competing activity must answer each data element in the bid spreadsheet. Competitors not answering each data element will be dropped from further consideration. Competitors providing false answers to any one of these data elements will be immediately excluded from the bid process for the NIIN being bid. Use of contractors or subcontractors by competing maintenance activities will be documented in the narrative section of the Bid Cover Memorandum (enclosure 4-2) including the verification specified in Par 4-7.a.(2).

The capacity and capability questions to be addressed are as follows:

- (a) Does the maintenance activity have proper test facilities in place and operational (e.g. dynamometer) to test repaired items in accordance with specifications provided in the Technical Manual (TM)? (Bid Spreadsheet Column Q)
- (b) Does the maintenance activity have all required special tools on hand to perform the specified maintenance tasks? (Bid Spreadsheet Column R)
- (c) Does the maintenance activity have sufficient shop space for adequate movement of personnel and equipment during the repair process? (Bid Spreadsheet Column S)
- (d) Does the maintenance activity have an adequate number of personnel available at the specified work center to support regional and local (non-COE) repair demands? (Bid Spreadsheet Column T)
- (e) Does the maintenance activity have personnel available with the appropriate skills to perform specified maintenance tasks? (Bid Spreadsheet Column U)
- (f) If applicable, does repair shop have an approved SRA? Use of SRAs by maintenance activities will be documented in the narrative section of the Bid Cover Memorandum (Enclosure 4-2).
- (g) Washout Rate/Not Repairable This Station (WO/NRTS) WO/NRTS rates of a maintenance activity may not exceed 50% for the component being bid. (Bid Spreadsheet Column V)
- (h) Output Per Month Maintenance activities must be able to repair no less than the minimum amount of components specified in the IFB. This minimum amount will be based on the estimated monthly production quota. (Bid Spreadsheet Column O)
- (2) Contractors and Subcontractors LSMMs will verify with the Contractor Officer Technical Representative (COTR) and document in the Bid Cover Memorandum narrative section that the contractor will provide the following;
 - (a) Repair performance (man-hours, parts, etc.) documentation.
 - (b) Management Information System interface with the LSMM's ISM Automation System.
 - (c) COE NIIN component or sub component being repaired.
 - (d) Contractor's surge capacity and capability.
 - (e) Liability statement for quality of product and services rendered.
- b. <u>Evaluation Criteria</u> Evaluation criteria used during the bid process is based on facts that pertain to regional and local repair operations. Competitors providing false information will be excluded from the bid process for the NIIN in question. Evaluation criteria are defined below. National repair data information will not be used during the evaluation process.
- (1) Bid Price LSMM bid prices are the estimated cost to repair a component at a specific maintenance activity. Bid price is the sum of labor cost and parts cost (reference figure 4-2).
- (a) Labor Cost Labor cost is the average cost expended to complete component repair work according to the specified Technical Manual. Labor cost is calculated as a function of the fully burdened hourly labor rate, multiplied by the average man-hours expended to repair a component (ISM automated system status code = S). (Reference figure 4-2)
- (b) Man-hours Man-hours are the average time, in hours, required for a maintenance activity to repair one component. Man-hours may vary among individual components undergoing repair due to the physical condition of the component at time of receipt at the maintenance activity. LSMMs can determine their historical average man-hours by dividing the total actual man-hours expended in the past 12 months for items with the same NIIN repaired by the total number of items repaired at the same facility in the past 12 months with the same NIIN.(Reference figure 4-2).
- (c) Parts Costs Parts costs are the average costs (AMDF or Local Purchase if authorized) required to pay for replacement parts (e.g. gaskets) and materials (e.g. lubricants, solder, etc.) consumed during the course of component repair. Parts cost may vary among

individual components undergoing repair due to the physical condition of the component at the time of receipt at the maintenance activity. LSMMs can determine their historical average parts cost by dividing the total dollar value expended on parts in the past 12 months for items with the same NIIN repaired (ISM automated system status codes = S) by the total number of items repaired (ISM automated system status code = S) at the facility in the past 12 months. (Reference figure 4-2)

Formula:

Bid Price = [(Labor Cost)+(Parts Cost)]

Labor Cost = [(Avg. Man-hours)*(Fully Burdened Hourly Labor Rate)] (Reference Chapter 3)

Average Man-hours = [(Total Man-Hours On Items Repaired or Canceled)/(Total # Of Items Repaired)]

Parts Cost = [(Total Dollars Expended For Parts On Items Repaired)/(Total # Items Repaired)]

Figure 4-2

- (d) Number Repaired Number repaired is the actual number of components with the same NIIN repaired (ISM automated system status code = S) at the maintenance activity during the past 12 months. Number repaired data will be used when total repair cost calculations for two or more maintenance activities are very close. The number of items repaired is considered to be a reliability factor.
- (2) Washout / NRTS Rate Washout rate is the ratio of items sent to the maintenance activity for repair, but for a variety of reasons, are not returned to use. Washouts may be components shipped to a maintenance facility in such poor physical condition that repairs are not economically feasible (e.g., hole in engine block) or the maintenance facility simply does not possess the required skills or equipment to repair the items. For the purpose of evaluating COEs during the bid process, work orders that have been closed out as NRTS will also be considered as a washout item. Work orders with ISM automated system codes X or W with one (1) man-hour or less expended and no parts cost will not be considered as a washout or NRTS. Washouts identified during initial inspection will not be considered as part of the washout or NRTS calculation. This process will allow LSMMs to distinguish between washouts due to poor physical condition, catastrophic failure, or the maintenance activity's inability to return the item to a serviceable condition. LSMMs can determine their historical washout rate by dividing the total number of items washed out/NRTS at the facility in the past 12 months (ISM automated system status code = X or W) on the particular NIIN up for bid by the total number of work orders completed (ISM automated system status code = S, X or W only) in the past 12 months with the same NIIN being bid (reference figure 4-3).

Formula

Washout Rate = [Total Washouts - (Washouts+NRTS less than or equal to 1 hr and with zero parts costs) / Total # Completed Work Orders]

Figure 4-3

(3) Washout/NRTS Cost - Washout cost is the average cost expended on a component either coded as a washout or NRTS item. Work orders with ISM automated system codes X or W with one (1) man-hour or less expended and no parts cost will not be considered as a washout or NRTS. LSMMs can determine their historical average washout cost by multiplying the average man-hours expended on items washed out/NRTS in the past 12 months (ISM automated system status code = X or W) by the fully burdened hourly labor rate. Then add the average cost for washed out/NRTS items over the past 12 months (ISM automated system status code = X or W) with the same NIIN being bid. (reference figure 4-4).

Formula

Washout Cost = [(Avg. Washout + NRTS > 1 man-hour and with zero parts costs)*Fully Burdened Labor Rate]+Avg. Washout/NRTS Parts Cost

Figure 4-4

- (4) Output Per Month Output per month is defined as the number of component repairs accomplished by the maintenance activity in the course of one month. This monthly output of repaired items will provide an indication of how many unserviceable components a maintenance activity is capable of repairing at a steady rate over the course of one year.
- (5) Number Of Demands Demands are the number of times a requisition has been submitted within the supply system for a particular NIIN or substitute NIIN. Under most circumstances, LOGSA CDDB provides this information. The demand will be computed using the most recent 12 month period at each installation. The RSMM/TSMM offices will obtain the CDDB data. Usually LSMMs will not be

required to provide this information in their bid. However, if the RSMM/TSMMs determine that the CDDB data is suspect the RSMM/TSMM may request the LSMM's assistance to obtain installation/state demand data.

4-8. Bid Analysis

All bids remaining after the screening and evaluation criteria have been applied will be analyzed. Analysis will examine total cost calculations. Total cost calculations is considered to be a measure of performance for each maintenance activity. A repair history with less than 12 completed work orders is considered an inadequate sample size and may require adjustment. As a first step in the analysis, the RSMM/TSMM will do the following:

- a. Compute the regional average washout/NRTS rates and the regional average washout/NRTS costs for any line having at least one bid on less than 12 completed work orders.
- (1) Regional Washout/NRTS Rate The regional washout rate is computed by dividing all washouts and NRTS (ISM automated system status code X, W) in the region by the total number of completed work orders (ISM automated system status code S, X, W). The RSMM/TSMM will apply the regional washout rate to any LSMM bid where historical completed work orders are less than 12 (reference figure 4-5).

Formula:

Regional WO Rate = (Total Regional Washouts + NRTS>1 hr and zero parts costs) / Total Regional ClosedCompleted Work Orders

Figure 4-5

- (2) Regional Washout/NRTS Cost The regional washout costs will be computed in two separate elements: parts costs and manhours.
- (a) Average Washout/NRTS Parts Costs Average washout parts costs are computed by adding the total dollar amount expended on parts for NRTS/ washout items in the region (ISM automated system status code X, W) and dividing that by the total number of items NRTS/washed out (reference figure 4-6).

Formula:

Avg. WO Parts Cost = (Total Dollars Expended For Parts On Washed Out + NRTS Items) / (Total Regional Washouts/NRTS)

Figure 4-6

(b) Average Washout/NRTS Man-hours - Average washout/NRTS man-hours are computed by adding the total man-hours for NRTS/washout items in the region (ISM automated system status code X, W) and dividing that by the total number of items NRTS/washed out (reference figure 4-7).

Formula:

Avg. Washout Man-hours = [(Total Man-hours Expended On WOs) / (Total Regional Washouts + NRTS)]

Figure 4-7

(3) The RSMM/TSMM will add the regional average washout parts cost to the product of the regional average washout man-hours and the appropriate LSMM fully burdened labor rate and apply this to any LSMM bid where the historical completed work orders are less than 12 (reference figure 4-8).

Formula:

Washout/NRTS Cost = (Avg. WO + NRTS Parts Cost) + (Avg. WO + NRTS Man-hours x Fully Burdened Labor Rate)

Figure 4-8

b. Regional Cost Calculations - The formula used to calculate total cost for regional work by maintenance activity is shown in figure 4-9.

Formula:

Total Regional Cost = Repair Cost + Washout Cost + Washout Buy Cost + Transportation Cost + MTTR Factor** Formula for MTTR Factor should be expressed prior to this formula.

This formula can be further broken down and reads:

Repair Cost = MA Repair Cost x [# Regional Demands x (1-WO/NRTS Rate)]
Washout/NRTS Cost = (Regional Demands x Washout/NRTS Rates) x Washout Cost
Washout/NRTS Buy Cost = (# Regional Demands x Washout/NRTS Rate) x Buy Price

Transportation Costs = [(# Regional Demands - # Local Demands) x (Transportation Cost + Packaging Cost)] x 2.

Figure 4-9

- c. MTTR Evaluation MTTR has a direct effect on the cost of stock levels (RO) within the region. The RSMM/TSMM will evaluate the LSMM's bid based upon the maintenance activities past COE MTTR. Procedures for evaluation will be based on the number of COE repairs completed at the maintenance activity in the last 12 months. MTTR calculations exclude all work orders that result in cancellation (Z), washout (W), no evidence of failure (U), or not reparable this station (X)."COE repair" is defined as work done only at a designated COE activity during the period the NIIN was a COE line.
- (1) The Regional Velocity Management (VM) value for 50% of the 2-year MTTR Category Average for the item up for bid will be identified. This is called the VM AVG (reference Figure 4-10 for formula). MTTR averages for each bidding Maintenance Activity will be computed using repair data on the NIIN up for bid or the appropriate MTTR Category. This is called MTTR (NIIN or CATEGORY) AVG. Each bidding MA will have a Bid MTTR computed using their MTTR (NIIN or CATEGORY) AVG minus the VM AVG or zero (0) whichever is greater. This Bid MTTR will be multiplied by the factor .0025. (Factor ".0025" is the RO cost of a one day increase in MTTR). The AMDF price and the number of demands will multiply this number. The number will be added to the repair cost, washout cost, and transportation cost to assist in determination of "Best Value".
- (2) If the maintenance activity for the NIIN has more than 12 COE repairs in a 12-month period, then use their actual MTTR NIIN AVG for that line. MTTR flow chart is illustrated in enclosure 4-4.
- (3) If the maintenance activity has less than 12 COE repairs of the NIIN in a 12-month period, but at least 12 COE repairs in the item's MTTR Category, use the MTTR Category Average for that maintenance activity.
- (4) If the maintenance activity has less than 12 COE repairs in its MTTR Category use the Regional MTTR Category Average from the previous FY (FY Regional MTTR Category Average, reference Figure 4-10).
- (5) The LSMM will coordinate with the RSMM to ensure that the work orders with previously identified "valid" line-stoppers (IAW Appendix H) will be subtracted from the MTTR computation process. The LSMM will provide an attachment to their bid that identifies the WON adversely affected by "line-stoppers". Only these WONs will be considered for credit against the competitive MTTR value for that installation used on the bid sheet for comparison. MTTR values for Regional Category Averages will not be adjusted for line-stoppers.
- (6) The initial COE award of a new candidate line is processed without consideration for MTTR. Any previous COE line dropped and subsequently re-inducted into the program will also compete without consideration for MTTR regardless of its previous MTTR history.4-9. Bid Challenge

4-9. Bid Challenge

All bids may be challenged or even rejected by the RSMM/TSMM. All bidders must respond to the challenge in writing. The RSMM/TSMM reserve the right to reject any or all bids. These issues will be decided on a case by case basis. The RSMM/TSMM will specify a deadline, usually not to exceed (NTE) 3 days to respond to any challenge. The RSMM/TSMM will challenge, telephonically, any bid based on one or more of the following criteria:

- a. The bid price {(man-hours X fully burdened labor rate) + parts cost} is less than 75% of the maintenance activity's actual average cost to repair as found in the ISM automation system, where the bidder has a repair history of at least 12 repairs in the last 12 months.
- b. The bid price is less than 75% of the regional average cost to repair as found in the ISM automation system

c. The RSMM/TSMM have a reason to believe that an error has been made on any portion of the bid submitted by a LSMM.

4-10. Source of Repair (SOR) Decision

- a. <u>Metrics</u> Regional work, by prime NIIN will be awarded to the bidder that has either the lowest calculated cost or who represents best value based on the evaluation factors in subparagraph 4-10b. Factors other than lowest calculated cost may also be considered when awarding regional work, such as, number of items repaired in the last 12 months, output per month, readiness, capacity, and utilization. The following is an explanation for the terms "lowest calculated cost" and "best value".
- (1) Lowest Calculated Cost The lowest calculated cost is the least complex form for a negotiated source of repair selection. This procedure evaluates competing cost proposals against the technical solicitation requirement and rates against those requirements on a go/no-go basis. The source of repair that meets the solicitation requirement may be selected on the lowest calculated cost or price. Reasons for awarding a bid to a bidder not having the lowest calculated cost will be explained during the PP&C.
- (2) Best Value The best value procedure is encouraged when the quality of the award process is improved. Implicit in a best value is the Army's willingness to accept other than the lowest cost, provided the added benefits of the higher offer exceed the additional cost. A cost-benefit trade-off analysis will be used to determine best value.
- b. <u>Evaluation Factors</u> Evaluation factors are those aspects of a proposal that are evaluated quantitatively and qualitatively by the selecting official to arrive at an assessment of best offer. ISM evaluation factors will include the following:
- (1) Special Feature A feature (capability or capacity) offered by a bidder that is not available or provided by a comparable bidder's offer and not required in effective program management.
- (2) Effective Utilization Use of existing sustainment maintenance infrastructure capability and capacity to gain economies through efficient use of core skills, equipment, and facilities.
- (3) Special Repair Authority SRAs are not required to bid on a maintenance repair code "D" reparable item. However, a maintenance activity with an approved SRA for the NIIN being bid may receive first consideration. A copy of the approved or requested SRA must be on file at the RSMM/TSMM office. The maintenance activity must provide an estimated cost (man-hours and parts) and frequency of application of the SRA task to annual production quantity being bid. The IFB narrative should reference the appropriate SRA and approval date.
- (4) Warranty History Quality Deficiency Reports (QDRs), Report of Discrepancies (RODs), Warranty Information Sheets and/or QA citations for superior or defective workmanship for products and services provided Reference Chapter 9.
 - (5) Maintenance Availability Available capability and/or capacity to accept the density of components or equipment in need of repair.
- (6) Performance Based on the maintenance activity's historical repair programs or a comparable repair program. Quality compliance, production, costs, and/or MTTR may be used to measure repair performance.
- (7) Technical Evaluation All bids will be evaluated against the technical solicitation requirements. The technical requirements are factors that have a significant bearing on the bidder's ability to meet the program requirements.
- c. A COE line may be awarded to more than one source of repair if it is determined that a single maintenance activity cannot meet all regional repair requirements. The RSMM/TSMM will make the decision to split the COE production at the PP&C on a case-by-case basis. The RSMM/TSMM will assign production quota(s) for each source of repair in the case of a split COE decision, giving consideration to production recommendations from the LSMM. The RSMM/TSMM will establish the supporting relationship for split COEs.
- d. When a winning bidder reveals that the maintenance activity no longer has the capacity in a particular work center to accept the work being awarded, the RSMM/TSMM may offer the work loadworkload to the next best value bidder. If the next bidder has the capacity to accept additional repair requirements, that activity may become the COE for that line. This situation may occur as work centers receive increasing amounts of COE work. The RSMM/TSMM also have the option to forward these additional requirements to the NSMM for consideration as cross regional or national work. Refer to Chapter 5 paragraph 5-12 for cross leveling details.

e. The RSMM/TSMM will notify the LSMMs of tentative SOR decisions once all bids are processed. The LSMM will advise the RSMM/TSMM if the selected maintenance activity does not have the capability or capacity to accept the new work.

f. The RSMM/TSMM will provide a copy of essential bid information used to determine the winning bidder to all bidders. This information will be provided to the NSMM and each LSMM once the award process is complete. Bid information will be provided to promote further competition for NIINs as they become eligible for rebid.

4-11. Workloading

COEs will be work-loaded and assigned a monthly repair quota by the RSMM/TSMM, based on annual production requirements. Repair quotas are based on projected demands and may be altered due to capacity limitation, training cycles, washout rates, past turn-in and repair experience and other unknown factors.

4-12. Parts Bidding and Management

- a. LSMM/AMM will use the current AMDF or local purchase price (if authorized) in their bid parts cost.
- b. LSMMs and AMMs may transfer available repair parts to COE repair sites. Repair parts costs will be charged to the COE, via a MIPR, using current AMDF or local purchase price plus transportation cost.
- c. LSMMs or AMMs may transfer any remaining parts to the new or alternate COE repair site from COE lines that have been surged, realigned, or rebid, charging current AMDF price plus transportation. (Reference Chapter 5, "Surge Management")
- d. LSMM and AMM managers may verify, with the COE repair site, that their repair parts are no longer required to support the COE line. If COE repair sites do not need the repair parts, the LSMM and AMM will return those repair parts to the supply system.

4-13. Performance Repair Standards

- a. COE line repair standards are based on average Class IX repair costs and man-hours expended during repair tasks on all completed work orders. Annual COE repair standards are based on the average repair standards from the most recent twelve-month period specified by the RSMM/TSMMs.
- b. The ISM automated management system will be used to compute new performance averages for each COE on a monthly basis using year-to-date completed work orders. Performance averages will be reviewed quarterly for each COE line and used to review COE repair average performance and adjust MIPRs.

4-14. Realignment/Rebid of COE Lines

- a. The rebid evaluation process will identify COE lines requiring reassignment to another installation/state within the region. LSMMs are not authorized to realign, or redistribute regional COE or surge workloads among their AMMs or maintenance activities without prior approval of their RSMM/TSMM.
- b. The RSMM/TSMM will use the following guidelines to realign and /or rebid COE lines:
- (1) New lines will be reviewed after three months of production. If the COE costs or performance fails to meet their bid, the COE will be put on notice. All COE lines with average repair costs exceeding the COE bid by 25% after six months of production will be reviewed for determination of reassignment, retention or rebid. The RSMM/TSMM will designate an allowable increase prior to each PP&C that will be taken into consideration for those lines that may be up for rebid due to cost factors.
- (2) When the current COE no longer has the capability to repair for regional programs, the surge management program will be initiated until the item can be rebid at the next PP&C.
- (3) When new regional participants or increased demands from current regional participants have overwhelmed the current COE's capacity, the surge management program will be initiated until the item can be rebid at the next PP&C.

- (4) When COE MTTR, during the previous 6 months, is 25% greater than the preceding fiscal year MTTR category regional average for like NIINs, the item will be rebid. Like components are based upon items repaired during the previous fiscal year in like work centers with similar repair times. MTTR is calculated using the work order received and repair completion Julian dates. Average MTTR fiscal year regional average formulas are as shown in figure 4-10.
- (5) COE lines consistently failing to meet monthly production quota, when sufficient quantities of unserviceable items have been received, will be rebid during the next PP&C.
- (6) Each COE line will be rebid within three years of initial award, regardless of COE performance. If at the initial three-year re-bid, the same repair activity is re-awarded the COE line, it is retained for an additional three-year period.

Formula:

Regional Avg. MTTR = [(Sum {Preceding Fiscal Year Like NIINs Completed Work Orders MTTR}) / (Preceding Fiscal Year Total # Like NIINs)]

Avg. MTTR = [(Sum {NIIN MTTR})) / (Total # NIIN Completed Work Orders)]

MTTR = (NIIN Completed Work Order Julian Date - NIIN Received Work Order Julian Date)

VM AVG = ([FY96 MTTR Category days + FY 97 MTTR Category days]/[FY 96 Closed Category Work orders + FY 97 Closed Category Work orders])/2

Previous FY Regional MTTR Category Average = FY MTTR Category days/FY Closed Work orders

MTTR=(NIIN WON COMPLETION DATE - NIIN WON RECEIVED DATE)

Figure 4-10

- c. If a COE line has met one or more of the rebid and/or realignment criteria listed above, the line will be rebid. Current COEs will be allowed to recompete for current work. The RSMM/TSMM will only accept bids from the current COE if the bid reflects one of the following:
- (1) If a COE has been repairing a specific NIIN for less than a year, the COE's bid must be equal to or greater than the average cost to repair during the time frame the NIIN has been in the COE.
 - (2) Average cost to repair the line over the last 12 months if the maintenance activity has been the COE for more than 1 year.
- d. The LSMM/AMM may transfer parts IAW procedures in paragraph 4-12.

4-15. Regional Repair Performance, Procedures, and Issues

The LSMMs will brief regional repair production performance for their COEs during the Production Performance Review and PP&C. Additionally, PP&C meetings will be used to discuss and solve regional and national repair procedures and issues.

4-16. PP&C Meetings and Production Performance Reviews

LSMMs may conduct local PP&Cs in accordance with local SOPs. Regional PP&Cs will be conducted semi-annually. During alternate quarters, a Production Performance Review videoconference may be conducted. The NSMM may participate in regional meetings.

4-17. Performance Metrics

- a. Each RSMM/TSMM will monitor and report, by region, the following performance measures to the ISM Corporate Board or other levels of leadership as requested:
 - (1) COE Distribution (# of lines) Reference Enclosure 4-5.
 - (2) COE Distribution (by Source of Supply) Reference Enclosure 4-6.
 - (3) Regional Production Performance (performance to receipts) Reference Enclosure 4-7.
 - (4) Washouts versus Wholesale Buys Reference Enclosure 4-8.

- (5) MTTR Regional Average by Commodity. Reference Enclosure 4-9.
- (6) Turn Around Time (TAT) Regional Average by Commodity Reference Enclosure 4-10.
- (7) Transportation Processing Time Reference Enclosure 4-11.
- (8) Bid Record by COE Reference Enclosure 4-12.
- b. The performance metrics listed are indicators of how well and how efficient the program operates on a continual basis. The data collected can be used to provide status updates as needed to any level of leadership inside or outside the ISM program.

4-18. Records Management Files of Results

RSMM/TSMMs will conduct separate spreadsheet analysis for each NIIN being bid. Printed results of all analysis will be filed at the RSMM/TSMM office. IFBs and all pertinent information and documents pertaining to bidding will be kept on file at the RSMMs office for 2 years.

Enclosure 4-1 Invitation For Bid (IFB)

Regional S	PARTMENT OF THE ARMY Sustainment Maintenance Manager ort xxxxx, XX 00000-0000
Office Symbol	Date
MEMORANDUM FOR SEE DISTRIBUTION SUBJECT: Invitation For Bid (IFB)	
1. This is official notification to all Local Sustainment Mair	ntenance Managers (LSMM) of an IFB for repair of the following component:
 a. NIIN: b. NOUN: c. END ITEM: d. Quantity to be repaired: Annual repair requirement i e. Quota: Estimated monthly production quota will be f. Specifications: Perform repairs IAW required 34-lev 	
2. LSMMs are responsible to immediately distribute the IF	Bs to their AMMs.
form fully and accurately. The bid must be delivered to the	standardized bid submission form. Answer all questions on the bid submission le address above in a sealed envelope IAW set bid procedures. Any deviations The deadline for receipt of all bids is 1700, 01 May 1998. (ascetics) Any bids

- 4. Opening of all bids submitted will commence at 0900, 02 May 1995 at the Regional Sustainment Maintenance Management (RSMM/TSMM) office. No late bids will be accepted except as outlined in the set bid procedures.
- 5. POC for this action is SFC Smith, RSMM/TSMM office, at DSN xxx-xxxx.

JOHN T. JONES CW3, USA ISM Coordinator

Enclosure 4-2.

Bid Cover Memorandum

DEPARTMENT OF THE ARMY

Loc	cal Sustainment Maintenance Manager (Local SOP) Fort xxxxx, XX 00000-0000
Office Symbol	Date
MEMORANDUM FOR COMMANDER, XX X FORT xxxxx, XX	
SUBJECT: Bid Submission	
	or processing and consideration for Center of Excellence (COE) repair work. All required bid py and Electronic Microsoft Excel spreadsheets (3.5-inch Floppy).
	eness and accuracy of all bids submitted and understands that no further changes can be the Invitation for Bid (IFB) is published by the RSMM/TSMM.
3. Narrative Comments. (Contractor and/or S	Sub Contractor Verification, SRA Validation)
	

4. POC for this action is Joe Brown, DSN xxx-xxxx.

JAMES S. BID Director of Logistics

Enclosure 4-3

Multiple Bid Spreadsheet

Multiple Bid Spreadsheet

COLUMNS

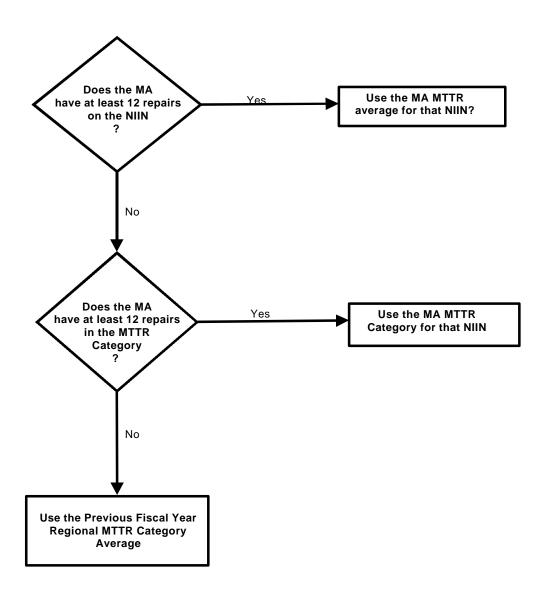
Α	В	С	D	E	F	G	Н		J	K	L
FSC	PRIME	NOUN	END ITEM	MA	MHRS	LABOR	PARTS	TOTAL	QTY	TOTAL	W/O
						COST	COSTS	REPAIR	RPR'D	W/O	RATE
								COST			
								Labo	r cost +	Zero	parts &
								Parts cost		< 01 :	= 1 mh
										excluded	

Continued: COLUMNS

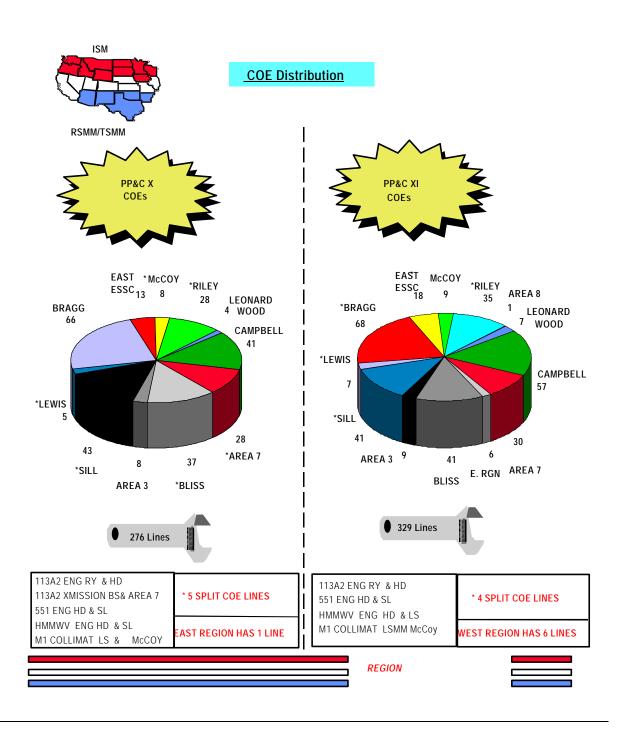
M	N	0	Р	Q		R	S	Т	U	V	W
W/O	TOTAL	OUTPUT/	MTTF	PRO	PER	REQUIRED	SUFFICIENT	ADEQUATE		WASHOUT	TNG
									W		
COST	CLOSED	MONTH		TES	ST	SPECIAL	SHOP	NUMBER	APPROPRIAT	RATE	REQ
									E		
	WON's			FACIL	ITIES	TOOLS	SPACE	PERSONNEL	SKILLS	NOT > 50%	(QTY/MO)
			Avg time,								
			in days,								
	Qty Rprd +		from open								Green Suit
		Total W/O		wo to							Only
		Completed									

Note: Signature and POC go on the bid coversheet.

Enclosure 4-4	MTTR Flow Chart	
LICIOSGIC T T	WITTIN TOWN OTHER	

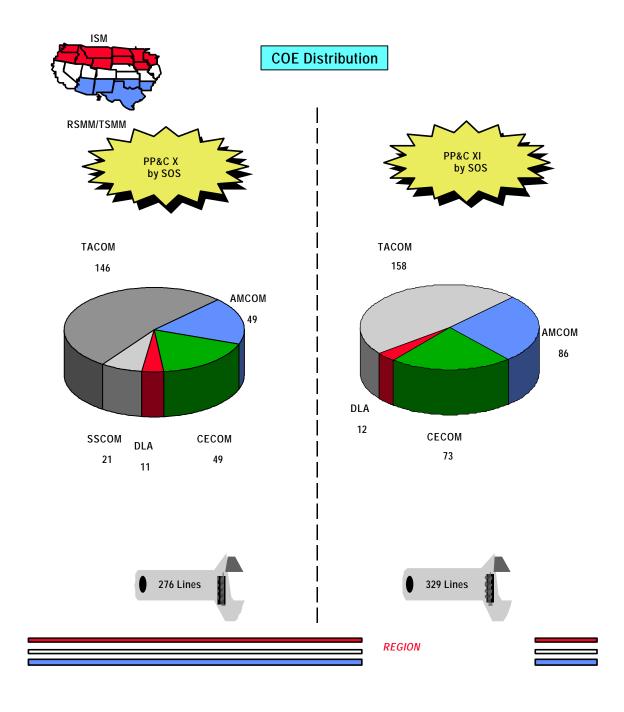


Enclosure 4-5 COE Distribution (#of lines)



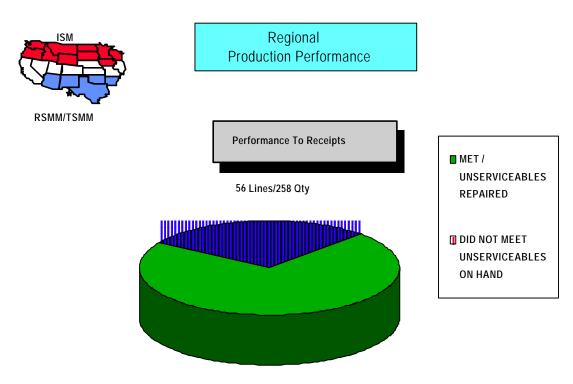
Enclosure 4-6

COE Distribution (by Source of Supply)



Enclosure 4-7

Regional Production Performance (performance to receipts)



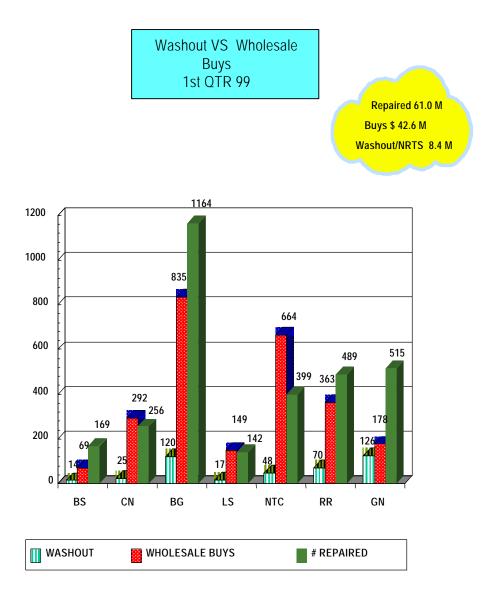
139 Lines/1906 Qty

LSMM	MET		UNSER ON F	IAND	NO UNSER REC	
	LINES	QTY	LINES	QTY	LINES	
Area 2	5	89	3	9	0	
Area 7	17	193	2	5	8	
Bliss	13	188	11	56	13	
Carson	24	200	6	38	10	
Hood	25	196	11	31	16	
Polk	4	73	1	1	0	57 Lines Received No Unserviceable Items
Knox	1	1	0	0	3	
McCoy	0	0	4	14	4	
Drum	20	553	8	69	0	
Sill	30	413	10	35	3	
TOTAL	139	1906	56	258	57	

REGION

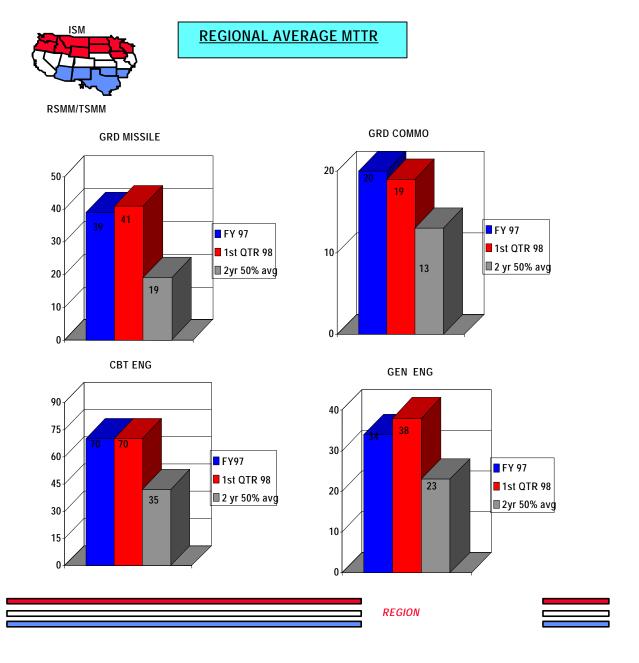
Enclosure 4-8

Washout versus Wholesale Buys



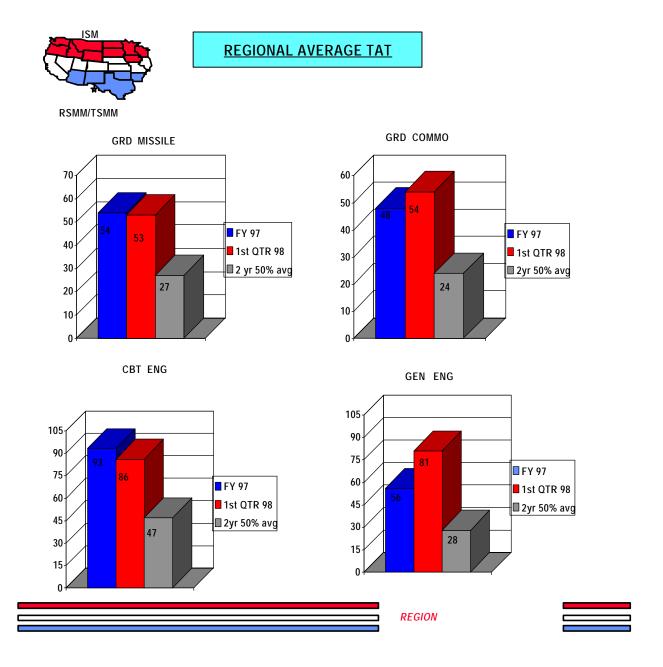
Enclosure 4-9

MTTR Regional Average By Commodity



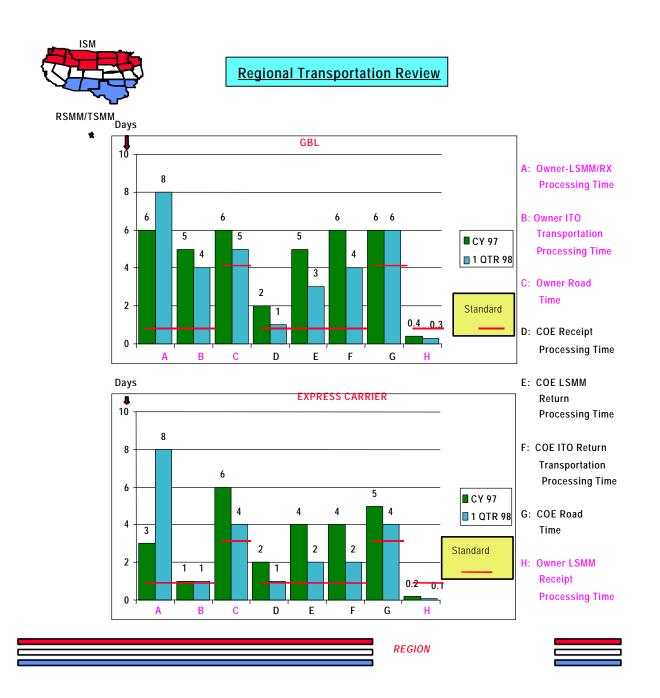
Enclosure 4-10

Turn Around Time (TAT) Regional Average by Commodity



Enclosure 4-11

Transportation Processing Time



Enclosure 4-12 Bid Record By COE



Bid Record by COE (PP&C XI)

COE	NEW BIDS	REBIDS	N/R BIDS	TOTAL	BIDS WON	% WON	SOLE BIDS	PRIOR COE
AREA 4	16	8		24	2	8%		
AREA 1	19	25		44	10	23%	1	2
AREA 8	13	10		23	1	4%		
GORDON	30	19	4	49	12	24%	9	2
CARSON	27	24		51	24	47%	5	6
WEST ESSC	9	1		10	5	13%	4	
STEWART	7	13		20	12	60%	8	4
LEONARD WOOD	5	7		12	3	25%	1	
LEWIS	13	15		28	2	7%	1	
MCCOY	15	14	_	29	1	3%		
RILEY	26	17		43	9	21%	3	
SILL	9	29	1	38	21	55%	7	16
	189	182		371	102		39	
							T	atal Dida
New Pide Cont. 70								otal Bids
New Bids Sent 70		N/R Bid	s Sent 14		Rebids	Sent 44	S	ent 114
New Bids Received		N/R Bids	Received 4		Rebids Re	eceived 43	0	verbuy 2
57		28	.6%		97.	7%	N	/R 10
81.4%							R	eceived 102
							8	9.5%